

ABSTRACT

A photovoltaic cell module for a receiver of solar radiation-based electrical power generating system is disclosed. The module includes an assembly for extracting
5 **heat from the photovoltaic cells. The assembly includes a coolant chamber positioned behind and in thermal contact with the exposed surface of the photovoltaic cells. The coolant chamber includes an inlet for a coolant and an outlet for heated coolant. The assembly also includes a plurality of beads, rods, bars or balls of high thermal conductivity material in the coolant chamber that are**
10 **in thermal contact with the photovoltaic cells and each other and together have a large surface area for heat transfer and define a three dimensional labyrinth that can conduct heat therethrough away from the photovoltaic cell or cells.**